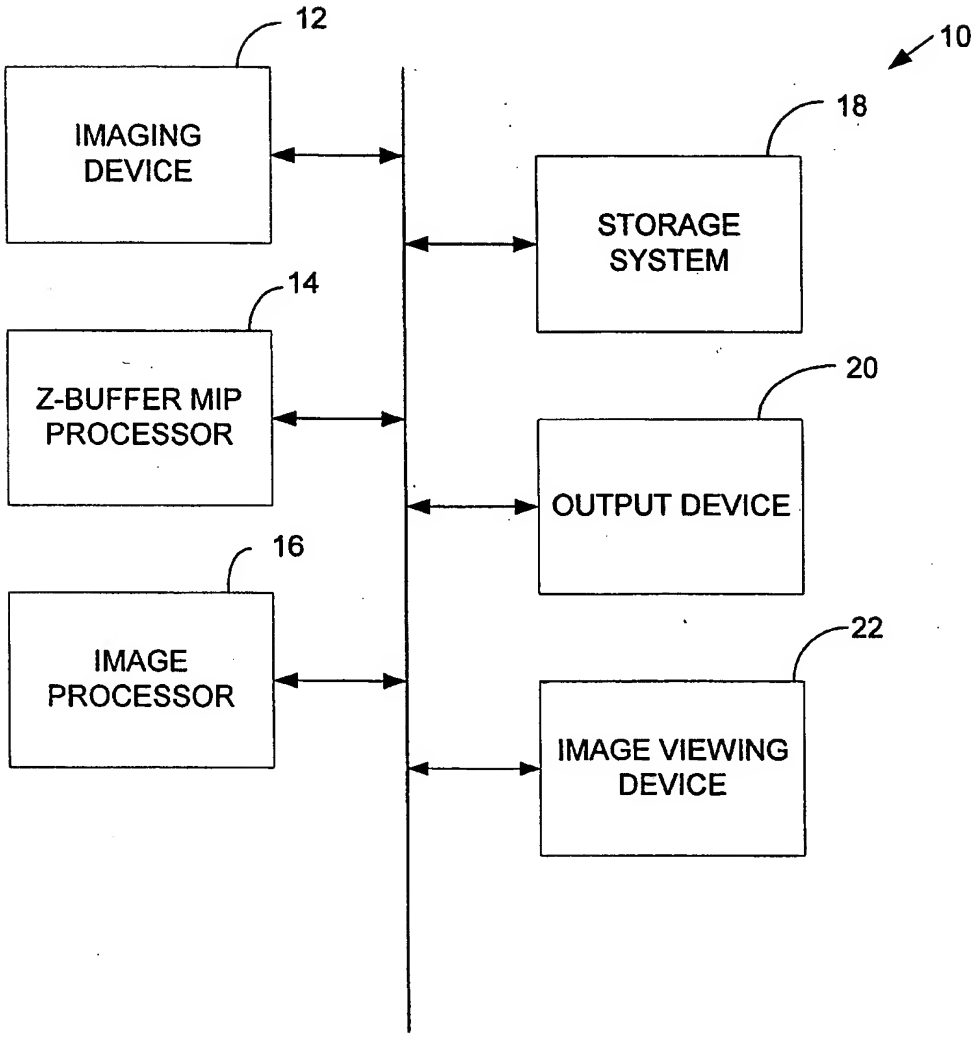
12
10
IMAGING DEVICE
18
STORAGE SYSTEM
14
Z-BUFFER MIP PROCESSOR
20
OUTPUT DEVICE
16
IMAGE PROCESSOR
22
IMAGE VIEWING DEVICE

FIG._1

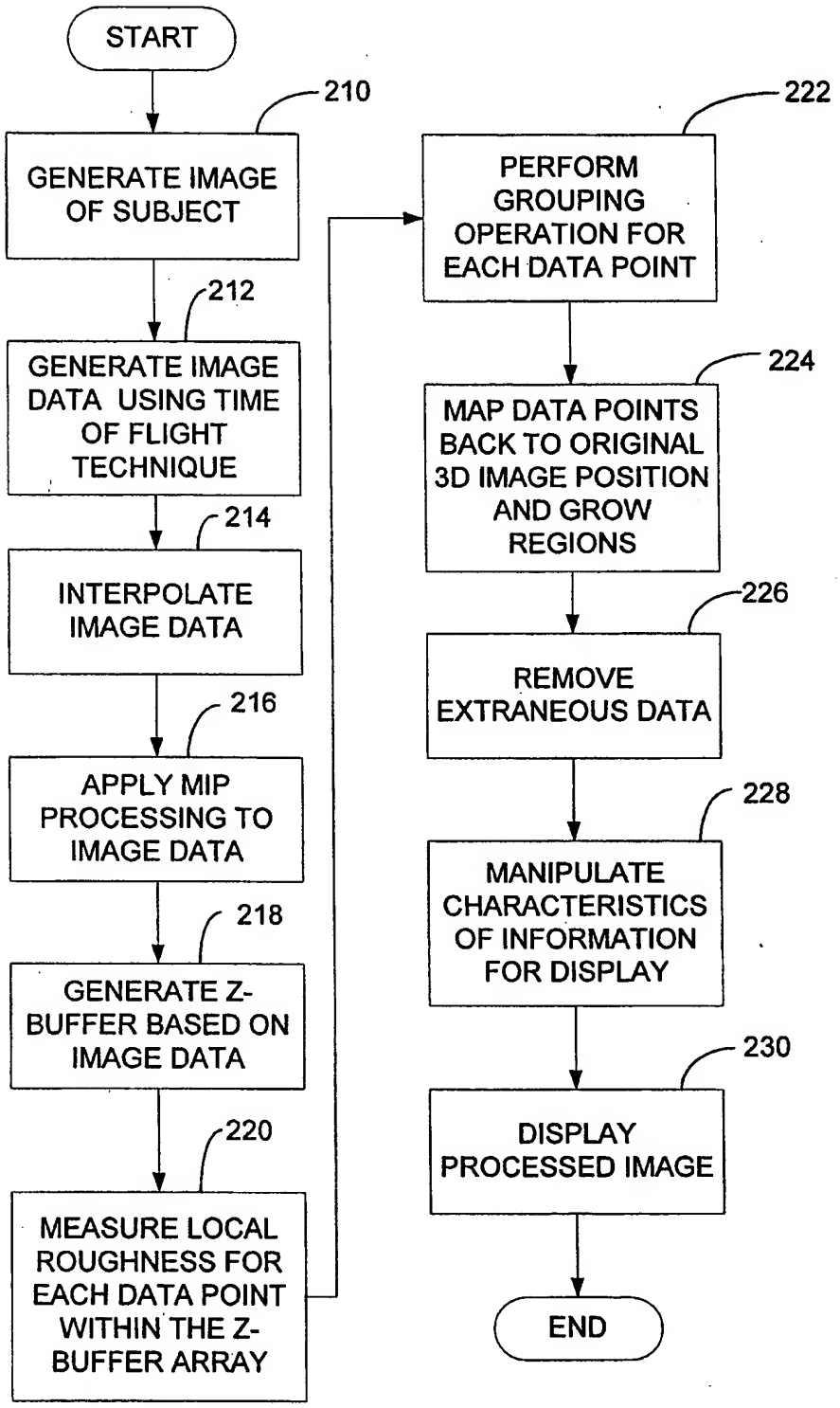
START
210
GENERATE IMAGE OF SUBJECT
212
GENERATE IMAGE DATA USING TIME OF FLIGHT TECHNIQUE
214
INTERPOLATE IMAGE DATA
216
APPLY MIP PROCESSING TO IMAGE DATA
218
GENERATE Z-BUFFER BASED ON IMAGE DATA
220
MEASURE LOCAL ROUGHNESS FOR EACH DATA POINT WITHIN THE Z-BUFFER ARRAY
222
PERFORM GROUPING OPERATION FOR EACH DATA POINT
224
MAP DATA POINTS BACK TO ORIGINAL 3D IMAGE POSITION AND GROW REGIONS
226
REMOVE EXTRANEOUS DATA
228
MANIPULATE CHARACTERISTICS OF INFORMATION FOR DISPLAY
230
DISPLAY PROCESSED IMAGE
END

FIG. _2

Figure 3:

Figure 4:

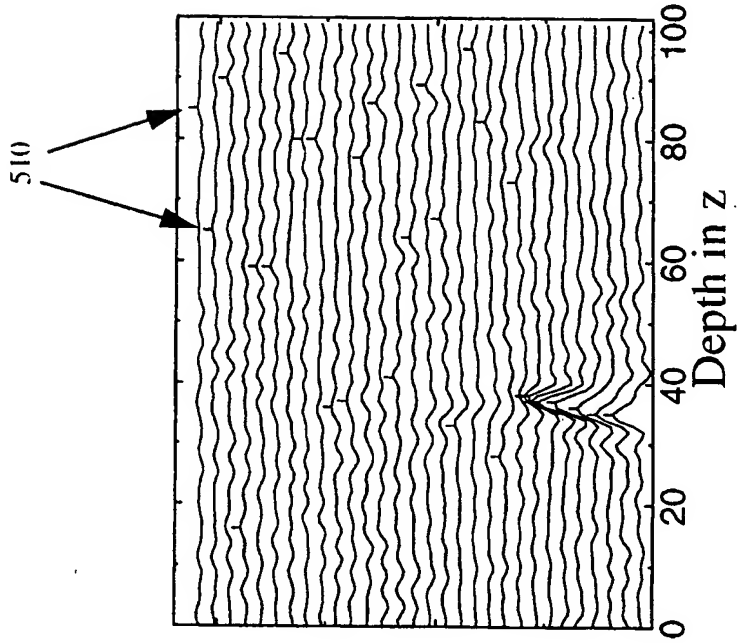

Figure 5:

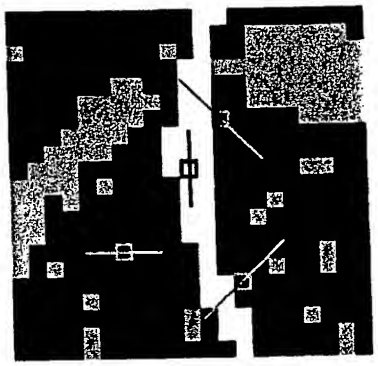

Figure 8

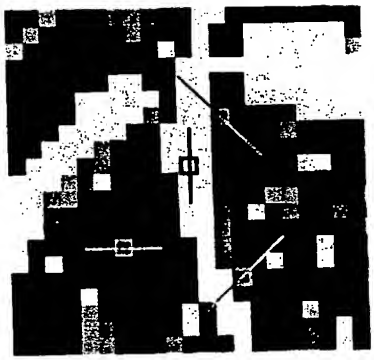

Figure 7

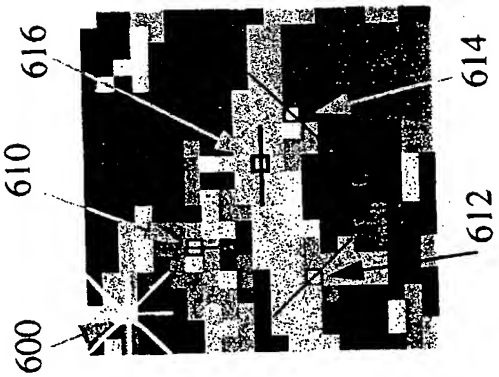

Figure 6

Figure 10

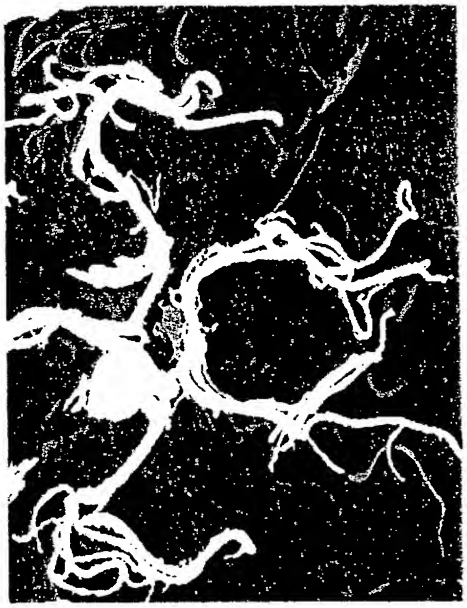

Figure 11

Figure 9

Figure 13

Figure 12

Figure 14

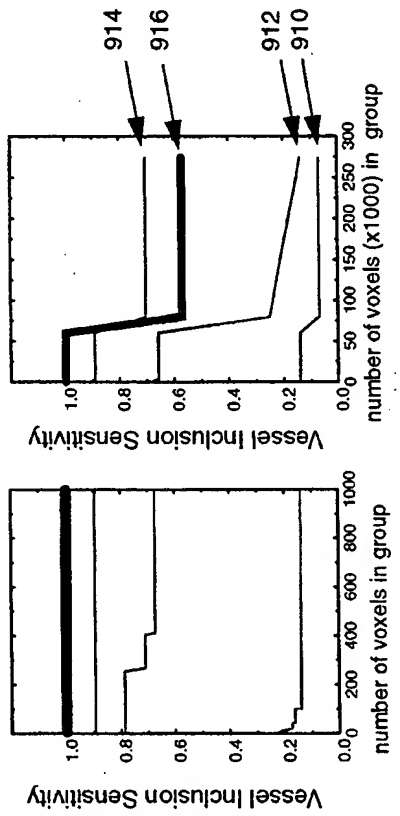

Figure 15

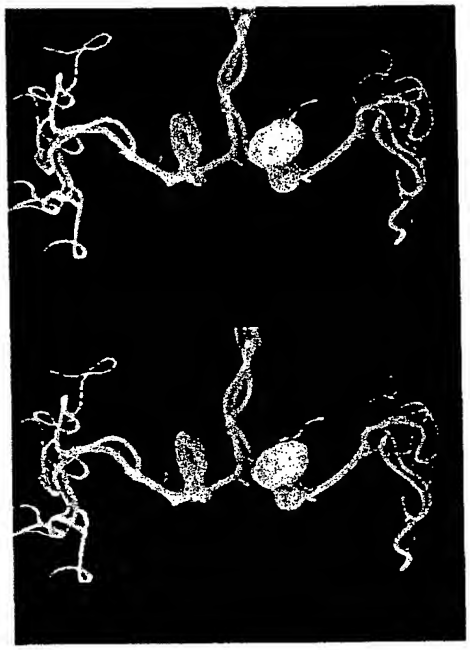

Figure 17

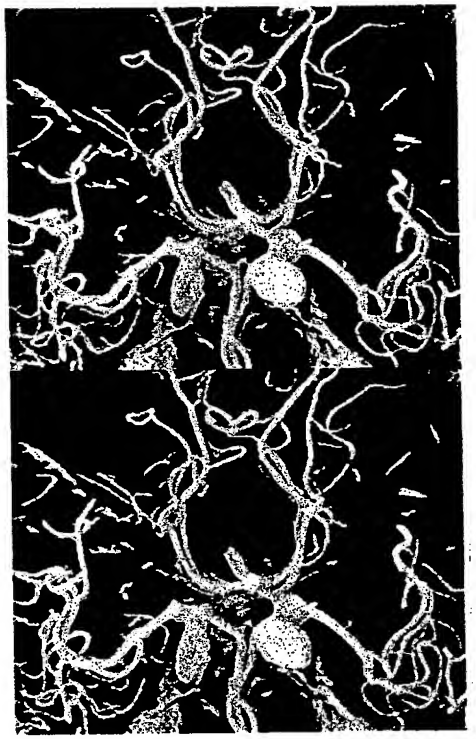

Figure 16

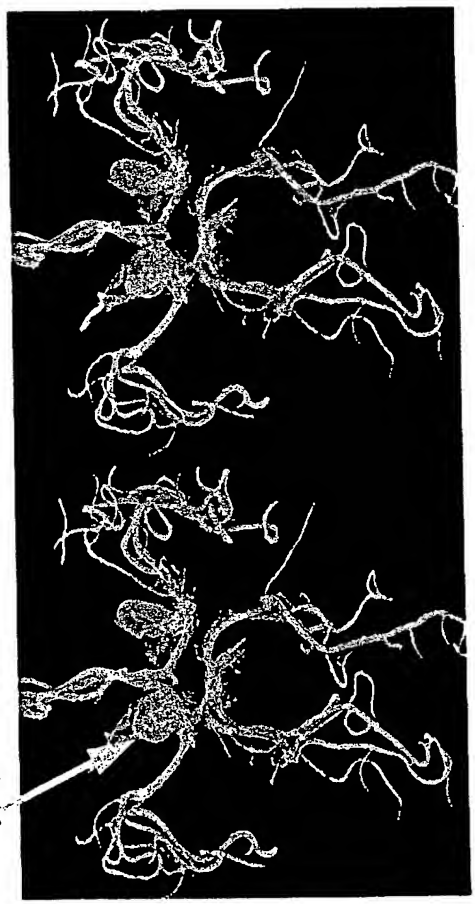

Figure 18

Figure 20

Figure 19

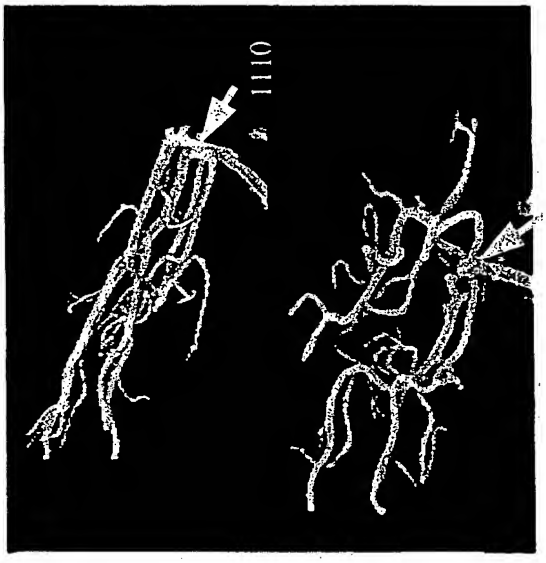

Figure 22

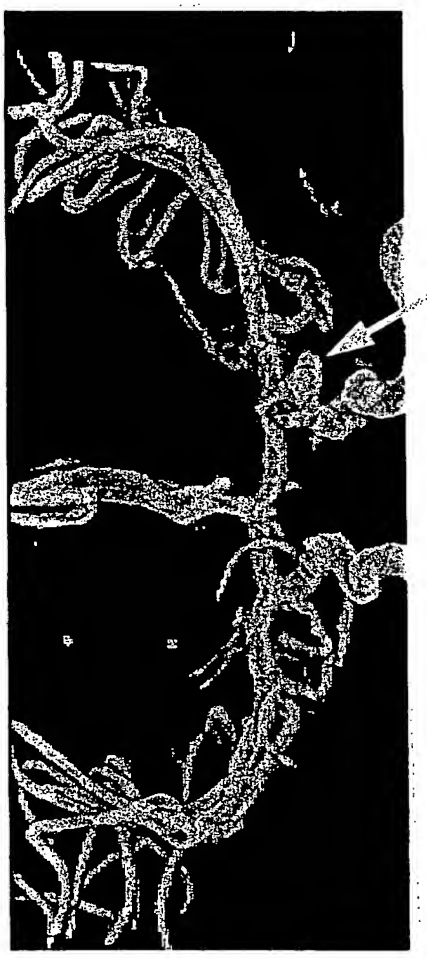

Figure 21

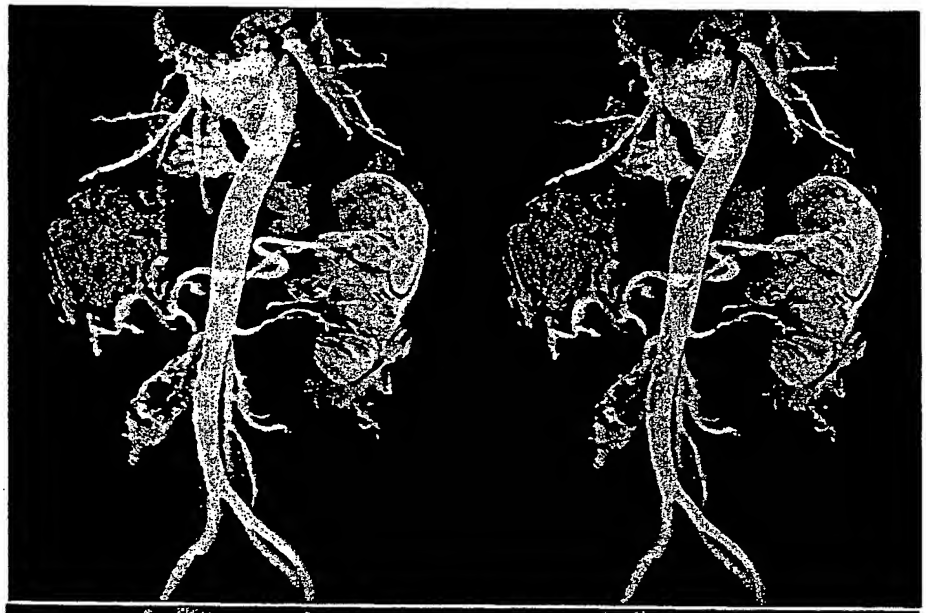

Figure 23

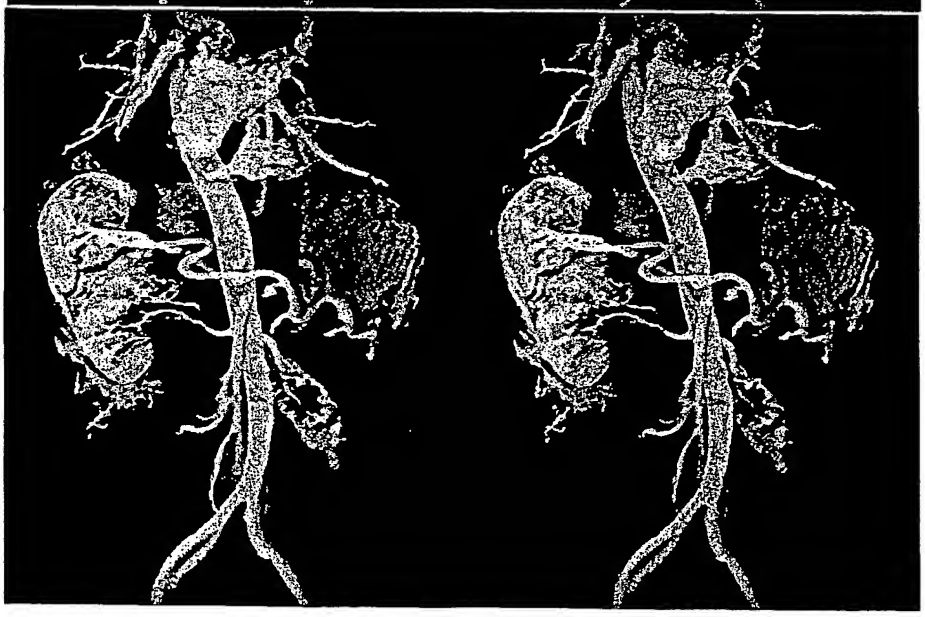

Figure 24

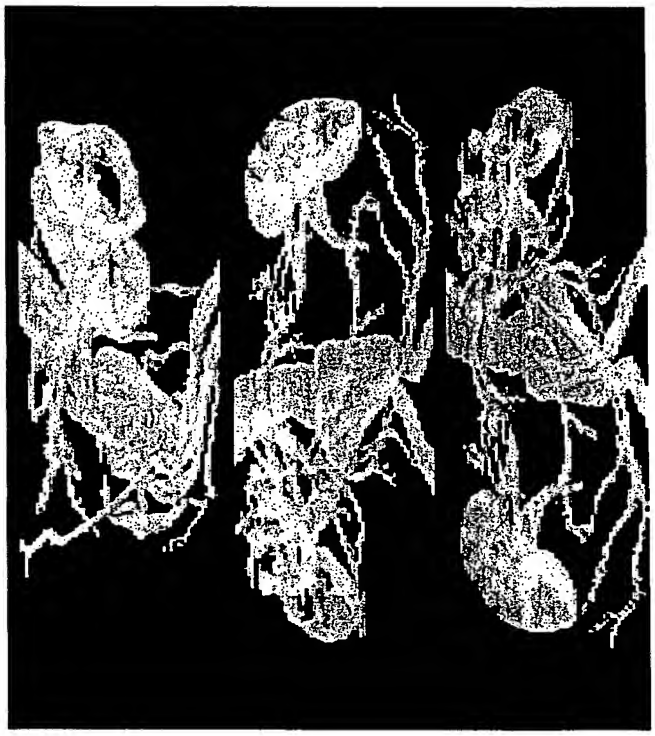

Figure 26

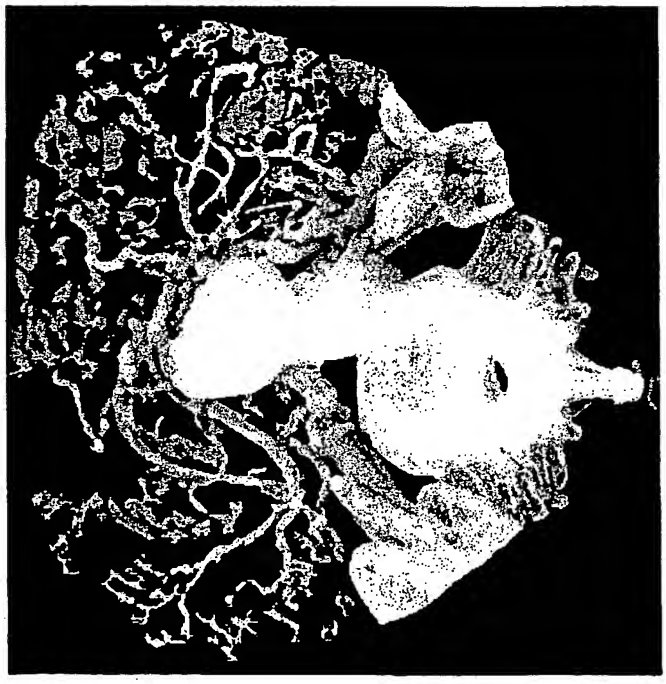

Figure 25